

## **Standardized Nerve Conduction Studies in the Lower Limb of the Healthy Elderly**

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### ***Abstract***

Nerve conduction studies are commonly performed in elderly individuals. No complete set of reference data for the distal lower limb nerves exists for this population, making it difficult to accurately interpret electrodiagnostic findings. The purpose of this study was to provide reliable reference data by comprehensively examining conduction characteristics in routinely tested peripheral nerves of the lower limb in a healthy elderly population. Conduction studies of the tibial, deep peroneal, sural and medial dorsal cutaneous nerves were performed in one lower limb of 122 healthy elderly individuals between the ages of 60 and 89 years. Peak amplitudes of the sural sensory action potential and the tibial compound muscle action potential correlated significantly with both age and leg length. All other parameters did not show significant correlation with age. Conduction velocities and distal latencies slowed significantly with increasing leg length except for tibial distal latency.